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ABSTRACT

This study examined similarities and differences among 15 computer-assisted career guidance (CACG) systems: (1) the Career Information System; (2) Choices; (3) Choices CT; (4) Choices Jr; (5) MODULAR C-LECT; (6) COIN; (7) COIN Jr; (8) DISCOVER for Colleges and Adults; (9) DISCOVER for High Schools; (10) DISCOVER for Junior High and Middle Schools; (11) Guidance Information System Version 17; (12) Guidance Information System; (13) Kansas Careers; (14) SIGI PLUS; and (15) VISIONS. The feature-cost analysis included features of system content, user friendliness, and support materials and services available from the developer; and costs of system-specific costs and constant costs. Data were gathered from CACG software use, support materials provided by developers, and telephone interviews with developers. Results are provided in tables. Tables 1 through 4 provide data on 12 CACG systems used in high school, college, employment service, vocational-technical school, library, rehabilitation correctional, and military settings. Table 1 includes system content, table 2 includes user friendliness, table 3 includes support materials and services available from the developer, and table 4 includes costs. Tables 5 through 8 provide a similar sequence of data on three CACG systems used in junior high/middle schools. Table 9 identifies state, territory, and city-specific availability of occupational information in the CACG systems. Table 10 identifies the country location, geographic data base origin, and language for the CACG systems. Table 11 provides addresses and telephone numbers of the 15 CACG system developers. (Author/NB)

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**A Differential Feature-Cost Analysis of Fifteen Computer-Assisted Career Guidance Systems:
Technical Report Number 10**

(Fourth Edition)

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**A Differential Feature-Cost Analysis of Fifteen Computer-Assisted Career Guidance Systems:
Technical Report Number 10 (4th Ed.)**

Abstract

The primary purpose of this study is to highlight similarities and differences among fifteen computer-assisted career guidance (CACG) systems so that practitioners, CACG system developers, policy makers, and researchers may make informed decisions concerning such systems. The specific CACG systems included in this analysis are: 1) the Career Information System (University of Oregon, 1992), 2) Choices (Careerware: ISM Systems Corporation, 1992), 3) Choices CT [for Adults in Career Transitions (Careerware: ISM Systems Corporation, 1992)], 4) Choices Jr [for Junior High and Middle Schools (Careerware: ISM Systems Corporation, 1992)], 5) MODULAR C-LECT (Chronicle Guidance Publications, Inc., 1992), 6) COIN (COIN Educational Products, 1992), 7) COIN Jr [for Junior High and Middle Schools (COIN Educational Products, 1992)], 8) DISCOVER for Colleges and Adults (American College Testing Program, 1992), 9) DISCOVER for High Schools (American College Testing Program, 1992), 10) DISCOVER for Junior High and Middle Schools (American College Testing Program, 1992), 11) Guidance Information System Version 17 (Riverside Publishing Company, 1992), 12) Guidance Information System (GIS II) (Riverside Publishing Company, 1992), 13) Kansas Careers (Kansas State University, 1992), 14) SIGI PLUS (Educational Testing Service, 1992), and 15) VISIONS (American College Testing Program, 1992). For the purposes of this analysis, features include: 1) system content, 2) user friendliness, and 3) support materials and services available from the developer, while costs include: 1) system-specific costs, and 2) constant costs that exist irrespective of the specific system used. The data presented in this analysis were gathered from CACG software use, support materials provided by the developers, and telephone interviews with the developers. The integration of differential feature-cost analyses into the process of software selection is also discussed. A secondary purpose of this study is to provide a comprehensive description of the fifteen CACG systems included in this analysis by identifying state, territory, and city-specific availability of occupational information in the CACG systems and by identifying the country location, geographic data base origin, and language for each system.

Background

Computer-assisted career guidance (CACG) systems have become one of the most common comprehensive counseling and guidance resources.¹ For the purposes of this paper, a computer-assisted career guidance (CACG) system is defined as

a system of interrelated computer-based components designed to facilitate self-assessment, the generation of occupational and educational alternatives, and the use of occupational, educational, and employment information. Such systems are often coupled with counseling interventions and various print and media-based support resources, and are used within an organization to assist individuals in making current career decisions as well as improving their capacity to make effective career decisions in the future (Sampson, 1993a).

An essential element in evaluating the appropriateness of potential systems involves an analysis of data on the effectiveness of CACG systems with different populations using various counselor intervention strategies. The process of completing research and evaluation studies is, however, a time-consuming process. It is not at all unusual to have research appear in the literature on CACG system versions that are no longer available. CACG systems are also dynamic, in that revised or entirely new versions of software appear regularly in response to user feedback and theoretical advances, as well as innovations in computer software and hardware. [See Reardon, Sampson, Ryan-Jones, Peterson, and Shahnasarian (1988), for a discussion of the comparability of different versions of a single CACG system]. These two problems, the time lag in publishing research and evaluation studies and the rapid evolution of CACG systems, necessitate a multidimensional approach to the software evaluation process.

The use of a differential feature-cost analysis offers a potential solution to the above problems. A differential feature-cost analysis allows the comparison of two or more CACG systems in terms of the features available with respect to the costs involved. Gati (1990) stated, "a feature analysis of the systems may be used to eliminate a particular system because of the presence (or absence) of a critical undesirable (or necessary) feature" (p. 122). For the purposes of this analysis, features include 1) system content, 2) user friendliness, and 3) support materials and services available from the developer, while costs include: 1) system specific costs, and 2) constant costs that exist irrespective of the specific system used. Because this type of analysis is limited to features and costs, both of which are known at the time software is released, the findings can be made available in a very timely fashion.

A differential feature-cost analysis is best integrated into the planning phase of the implementation process within an organization (Sampson, 1984) as follows:

- 1) Assess current client and organizational needs;
- 2) Briefly review a differential feature-cost analysis to become familiar with available features;
- 3) Weigh the importance of various features (Gati, 1990; Krumboltz, 1990; Oliver, 1990) and cross out features that are not relevant in light of client and organizational needs (Oliver, 1990) and cross out features that are constant across systems (all receiving a "yes") (Jepsen, 1990);

¹ See Sampson and Reardon (1991) for a general examination of trends and problems associated with CACG design and use, and Sampson (in press) for an exploration of factors that facilitate and inhibit the design and use of CACG systems. Comprehensive recommendations for improving the design and use of CACG systems have been proposed for North America (Sampson, Reardon & Lenz, 1991) and for Europe (Banks & Watts, 1990). Bibliographies are available that address CACG general issues (Sampson & Reardon, 1993a) and CACG ethical issues (Sampson, 1993b).

- 4) Review a differential feature-cost analysis to identify CACG systems that have the potential to meet client needs within the context of the goals, theoretical orientation, staff, and financial resources of the organization;
- 5) Evaluate the software identified in the previous step in terms of potential effectiveness in meeting current client and organizational needs by having staff actually use the software, reviewing support materials from the developer, reviewing documents that describe system use and evaluate system effectiveness, discussing system use with staff and clients from other organizations, and temporarily using the system with actual clients;² and
- 6) Evaluate the remaining software in terms of costs (Maze, 1985) and available financial resources (Krumboltz, 1990).

"The interaction of CACG system features and costs with varied client populations and organizational variables, is too complex to allow one "best" system to exist for all situations (Sampson & Reardon, 1990, p. 146). As a result, the task of the practitioner is to ask the question: "Given our client population, organizational structure, financial resources, staff (time and skills), and historical/theoretical approach to service delivery, which CACG system provides the features that we need at an acceptable cost, and has been shown to be effective for clients under these operating conditions?" (Sampson & Reardon, 1990, p. 146).

Purposes of the Study

The primary purpose of this study is to highlight similarities and differences among fifteen computer-assisted career guidance systems, so that practitioners may make more informed decisions concerning the adoption of such systems, CACG system developers may more systematically present information about their software, policy makers may monitor the developing scope of system features and costs, and researchers may more fully describe CACG treatment interventions in their studies. The specific CACG systems included in this analysis are: 1) the Career Information System (University of Oregon, 1992), 2) Choices (Careerware: ISM Systems Corporation, 1992), 3) Choices CT [for Adults in Career Transitions (Careerware: ISM Systems Corporation, 1992)], 4) Choices Jr [for Junior High and Middle Schools (Careerware: ISM Systems Corporation, 1992)], 5) MODULAR C-LECT (Chronicle Guidance Publications, Inc., 1992), 6) COIN (COIN Educational Products, 1992), 7) COIN Jr [for Junior High and Middle Schools (COIN Educational Products, 1992)], 8) DISCOVER for Colleges and Adults (American College Testing Program, 1992), 9) DISCOVER for High Schools (American College Testing Program, 1992), 10) DISCOVER for Junior High and Middle Schools (American College Testing Program, 1992), 11) Guidance Information System Version 17 (Riverside Publishing Company, 1992), 12) Guidance Information System (GIS II) (Riverside Publishing Company, 1992), 13) Kansas Careers (Kansas State University, 1992), 14) SIGI PLUS (Educational Testing Service, 1992), and 15) VISIONS (American College Testing Program, 1992). A secondary purpose of this study is to provide a more comprehensive description of the fifteen CACG systems included in this analysis, by identifying state, territory, and city-specific availability of occupational information in the CACG systems and by identifying the country location, geographic data base origin, and language for each system.

² See Bridges (1987), Forrer (1987), Maze (1984), Maze (1989), Maze and Cummings (1982), National Career Development Association (1991), and Riesenberg (1984) for detailed descriptions of the software evaluation process. Also see the Association of Computer-Based Systems of Career Information (1982), Caulum and Lambert (1985), American Association for Counseling and Development (1988), the National Career Development Association (1988), the National Board for Certified Counselors (1989), and the American Psychological Association (1986) for national standards on the development and use of CACG systems.

Methodology

CACG System Selection Criteria

The following criteria were used in selecting CACG systems for inclusion in this analysis: 1) Provision of system components that address self-assessment, the generation of occupational alternatives, and the delivery of occupational information; and 2) Use as a computer-based career information delivery system in more than one state, territory, or city; or 3) Use in more than 500 sites in the United States.

Establishment of Features and Costs

Bloch and Kinnison (1989), Harris-Bowlsbey (1983a; 1983b; 1984; 1985), Heppner and Johnston (1985), Katz and Shatkin (1983), and McKinlay (1984) suggested features which were used to develop system content criteria. The criteria for user friendliness were taken from the evaluation standard developed by Sampson and James (1984) as well as features described by Heppner and Johnston (1985) and Bloch and Kinnison (1989). The criteria for support materials and services available from developers were derived by the authors via discussions with system developers. Cost criteria were taken from Maze (1985) and discussions with system developers.

This is the fourth edition of CACG system feature-cost analyses completed at Florida State University. With each subsequent edition, additional CACG systems and features have been added. By adding additional CACG systems, as suggested by Garcia and Plansker (1990), the analysis more accurately reflects the current range of career guidance practice. In the process of analyzing each CACG system for this study, the authors chose to add new features to the analysis, and to subdivide earlier feature categories to better reflect the contents of the fifteen systems.

Procedures

A nine member research team was assembled to conduct this analysis. The research team met to review the previous feature-cost analysis and the purposes of the present research. Each member of the research team agreed to be lead researcher for one or more systems. Each lead researcher used the features associated with their respective system(s) and reviewed support materials available from the CACG system developer(s). Telephone contacts were used to clarify specific questions related to features. The research team then met as a group several times to discuss common criteria for features and to suggest the addition of new features or the deletion of previous features. In situations where different terminology was used by developers to represent similar features, a "/" mark was used to combine terms, e.g., work tasks/activities. After data collection was completed, a second researcher independently verified the accuracy of the data recorded by the lead researcher. After all feature tables were complete, one researcher compiled cost data from telephone contacts with developers or their representatives. A draft of the report was then sent to the developers of each system to identify factual errors and discuss the criteria for receiving a "yes" or "no" for specific features in question. Factual errors were then corrected and developer comments were taken into consideration by the authors in completing the analysis. The authors assume responsibility for the quality of the analysis and related interpretations that are included in this study.

Limitations

While every attempt has been made to be accurate, the reader should be aware of the inherent limitations of any methodology. First, the following analysis does not examine the effectiveness or desirability of the features identified for the fifteen systems. In considering effectiveness, Jepsen (1990) stated:

The vast amount of information included in the findings [3rd Edition of this feature-cost-analysis] required some simplification. But the mere presence of a feature as part of any complex system does not assure its effectiveness. By analogy one would not always buy the auto with the most "whistles and bells" rather than the one where the whistles actually made a difference, as the warning devices telling the operator that the door is ajar or the

signal that your turning light is flashing. Many competing sounds are a nuisance rather than a help. Likewise, too many CACG features are not necessarily a sign of system strength (p. 130).

Krumboltz (1990) noted a similar caution when he stated:

For example, it is reported that there are videotapes for counselor training available in five out of the nine systems under review [3rd Edition of this feature-cost-analysis]. A mechanical use of these guidelines would give an equal weight to each of the five programs for having such a videotape. However, some of these videotapes must be superior to others in their creative artistry, their ability to communicate effectively and their ability to maintain viewer interest. The existence of a videotape could be an advantage or a disadvantage depending on the quality of the tape itself. Similarly, each of the other features might be executed to different standards of excellence (p. 134).

With respect to desirability, Gati (1990) cautions that CACG features initially perceived as desirable may actually, upon more critical reflection, be judged as unnecessary or detrimental in relation to good career guidance practice. In view of the variability in both the effectiveness and desirability of various features, the reader is strongly encouraged to examine the CACG research and evaluation literature to ascertain the relative merit of these features. In order to help individuals locate appropriate literature on system design and performance, system developers often provide system-specific bibliographies upon request. Additional system-specific bibliographies are available as follows: Choices (Sampson, Reardon, & Lapointe, 1993), DISCOVER (Sampson & Reardon, 1993b), and SIGI PLUS (Sampson & Reardon, 1993c).

A second limitation involves the use of a "checklist" approach in presenting the data. In an effort to present feature data in a succinct manner, a dichotomous yes - no "checklist" comparison of systems was used, i.e. "Feature X: Does System A have it? Does System B?" This approach effectively simplified a massive amount of data. However, potential problems occur when this methodology oversimplifies and obscures reality. Certain features cannot be adequately explained by this "yes" - "no" analysis. For example, the checklist indicates that System A handles "understanding life-career roles" and System B does not, while System B handles "issues related to child care" but System A does not. These statements may be true, but not fully informative. The real point in these examples is that where System A concentrates more on general concepts, System B offers more specific information on coping with new life-career roles. The decision as to which approach is "best" depends on typical client needs in a particular setting as well as the theoretical orientation and assumptions of staff members.

Also related to the limitation of using a "checklist" approach, the awarding of a "no" for any given system feature is not necessarily "bad" and the awarding of a "yes" for any given system feature is not necessarily "good." In some cases a "no" may not indicate the lack of a relevant system feature. For example, if a system is not designed to use function keys, then a "yes" for having an introductory orientation to function keys is irrelevant. Conversely, a "yes" may not indicate the presence of a relevant system feature. For example, if the system uses a conceptual schema for organizing the world-of-work that a professional views as inappropriate, then a "yes" for this system feature is irrelevant.

Oliver (1990) noted that the checklist approach taken in this feature-cost analysis, "is a tool to be used in evaluating a CACG system for a specific population. Totaling the "yes" and "no" items does not constitute an evaluation in and of itself" (p. 139). Therefore, this comparative analysis is not a "score sheet," but a preliminary guide for further detailed consideration about whether a

particular feature is important for a given clientele. It is hoped that although this method may blur a few trees, it can provide a useful map of the forest.³

Results

The original feature-cost analysis of SIGI PLUS and DISCOVER for Adult Learners (Sampson, Peterson, Domkowski & Reardon, 1986) had 137 feature items. The second and third editions had 353 and 424 items, respectively, while the present analysis includes 504 items for the high school/college and adult systems and 143 items for the junior high/middle school systems. Not only have developers of CACG systems added features, but the inclusion of additional systems with distinct features in the analysis has also dramatically increased the number of features used in this review.

The results of the analysis are provided in a series of Tables. Tables 1 through 4 provide data on 12 CACG systems used in high school, college, employment service, vocational-technical school, library, rehabilitation, correctional, and military settings: Table 1 includes system content; Table 2 includes user friendliness; Table 3 includes support materials and services available from the developer; and Table 4 includes costs. Tables 5 through 8 provide a similar sequence of data on 3 CACG systems used in junior high/middle school settings. Table 9 identifies state, territory, and city-specific availability of occupational information in the CACG systems, including official governmental designation as a computer-based career information delivery system (CIDS).⁴ Table 10 identifies the country location, geographic data base origin, and language for the CACG systems included in this report. Table 11 provides the addresses and phone numbers of the fifteen CACG system developers to assist the reader in continuing the evaluation process.

Discussion

In drawing conclusions from Tables 1 through 8, it is important to consider the following caveats. First, CACG system features vary considerably in perceived importance among practitioners, CACG system developers, policy makers, and researchers. The capacity to identify occupational alternatives by different key variables, the inclusion of different categories of occupational and educational information, or the inclusion of an integrated decision-making process that guides an individual's use of the system, could each be valued very differently among professionals. Second, CACG system costs vary considerably according to base price and pricing structure. Variations in discounts for leasing more than one copy of the software, discounts for multi-year leases, the option for using software on multiple computers at one institution at no additional cost, multiple institution software discounts, state-wide software discounts, and unit

³ For further discussion of methodological issues, see Garcia and Plansker (1990), Gati (1990), Jepsen (1990), Krumboltz (1990), and Oliver (1990) for critical reviews of the third edition of this feature-cost analysis (Sampson, Reardon, Humphreys, Peterson, Evans, & Domkowski, 1990) and Sampson and Reardon (1990b) for a rejoinder and a discussion of implications for practitioners, researchers, CACG system developers, and public policy makers. While acknowledging the value of adding more qualitative, outcome-oriented judgments to increase the utility of this analysis for software selection, such an effort is beyond the practical scope and resources available for this study. The present analysis is intended to provide a foundation for subsequent, more comprehensive evaluations of CACG systems.

⁴ Lester and Ollis (1988) defined CIDS as, "computer-based resources that provide information on occupations and related education and training opportunities" (p. 205). Hopkins, Kinnison, Morgenthau, and Ollis (1992) stated that CIDS, "provide useful information for people who are exploring, planning, or making decisions about careers. CIDS contain national, state, and local information about occupations, educational and training institutions and programs, and related subjects. . . . Most of these systems are computer-based, but other media are also used to provide information. Tabloid newspapers and telephone hotlines, for example, can reach people in areas without access to computerized systems" (p. 1).

costs of nonconsumable and consumable support materials may have considerable impact on the ultimate costs over time. Decisions regarding CACG system adoption should be based on a careful analysis of the interaction of features, costs, and the context for implementation of the system. The context for implementation could include the mission of the organization, theoretical assumptions of counseling and guidance, staff competencies, and the size of the organization. The findings of this report can be a starting point for making decisions about CACG adoption.

As shown in Table 9, ten of the fifteen CACG systems examined in this study provide state-specific occupational information. In many cases, State Occupational Information Coordinating Committees (SOICCs) have recognized the efforts of a CACG system developer to provide state-specific information by designating a CACG system as the official CIDS for that state (or territory/city). Even when a SOICC has recognized one system, in some cases other CACG system developers have still made the effort to provide state-specific information. It appears that several CACG system developers have made a strong commitment to providing state-specific information in a variety of states.

Table 10 indicates that the use of the fifteen CACG systems included in this analysis is beginning to spread beyond the original countries of origin. It would appear that CACG systems are gradually becoming an international resource for the delivery of career guidance services. The international availability of CACG systems and CACG system data bases has the potential to further encourage the development of a global economy by facilitating the education, training, and employment of individuals across national borders.

Conclusion

Hopefully, by making it easier to examine the features and costs of CACG systems, professionals will be both better motivated and more capable of dealing with the complex evaluative considerations that undergird the selection of CACG systems for specific purposes and settings. The ultimate effectiveness of this feature-cost analysis, therefore, can be measured by the willingness of professionals to commit the time and energy to move beyond basic surface-level evaluations to more theory-based, context-specific, comprehensive evaluations of CACG system performance. The ultimate beneficiaries of such an effort would be the millions of adolescents and adults who seek assistance each year in making career choices (Sampson & Reardon, 1990).

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Table 1

Comparison of System Content

System Content ¹	CIS2	CH3	CHCT4	CLECT5	COIN6	DCA7	DHS8	GIS179	GIS II10	KC11	SP12	VIS13
<u>Introduction</u>												
Overview of system content	yes	yes	yes	yes	yes	yes	yes	no	no	yes	yes	yes
Explicit recommended pathway for use of the system based on user characteristics ¹⁴	no	no	no	no	no	yes	yes	no	no	no	yes	no
<u>Assessment</u>												
On-line self-assessment ¹⁵	yes	yes	yes	no	no	yes	yes	yes	yes	yes	yes	yes
abilities/skills/activities	no	no	no	no	no	yes	yes	no	no	no	no	no
experiences	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
interests/fields of knowledge	yes	yes	yes	yes	no	yes	yes	yes	yes	yes	yes	no

¹ Some CACG system content features are easy to identify, while other system content features are embedded within other features and are more difficult to locate. Software developers can provide information about locating specific system content features that are not readily apparent.

² Career Information System (University of Oregon, 1992) Operating in 13 states and 1 city with localized information. Specific information included may vary slightly from state to state.

³ Choices (Careerware-ISM Systems Corporation, 1992)

⁴ Choices CT (for Adults in Career Transitions (Careerware-ISM System Corporation, 1992))

⁵ MODULAR CLECT (Chronicle Guidance Publications, Inc., 1992)

⁶ COIN (COIN Educational Programs, 1992)

⁷ DISCOVER for Colleges and Adults, (American College Testing Program, 1992) A very similar version, DISCOVER for Colleges and Adults, (Special Version), is also available. Differences between these versions include lower reading level, reduced number of user characteristic categories required for "guidance approach" sign-on, localization options for sign-on process, and elimination of counselor reports that require personal data.

⁸ DISCOVER for High Schools (American College Testing Program, 1992)

⁹ Guidance Information System Version 17 (Riverside Publishing Company, 1992)

¹⁰ Guidance Information System: (GIS II) (Riverside Publishing Company, 1992)

¹¹ KANSAS CAREERS (Kansas State University, 1992)

¹² SIGI PLUS (Educational Testing Service, 1992)

¹³ VISIONS (American College Testing Program, 1992)

¹⁴ With DISCOVER for Colleges and Adults and DISCOVER for High Schools, recommended pathway is optional with module one.

¹⁵ The user reads descriptions of career variables and indicates personal preferences.

System Content	CIS	CH	CHCT	CLECT	COIN	DCA	DHS	GIS 17	GIS II	KC	SP	VIS
life-career roles	no	no	no	no	no	yes	no	no	no	no	no	no
life transitions	no	no	no	no	no	yes	no	no	no	no	no	no
readiness for career choice	no	no	no	no	no	yes	yes	no	no	no	no	no
temperaments	yes	yes	yes	yes	no	no	no	no	no	yes	no	no
values	yes	no	no	no	no	yes	yes	yes	yes	no	yes	no
values clarification exercise	no	no	no	no	no	no	no	no	no	no	yes	no
Capacity to complete paper-and-pencil version of on-line assessment prior to computer use ¹⁶	yes	yes	yes	yes	no	yes	yes	yes	yes	yes	no	yes
Standardized tests admin. on-line ¹⁷												
Harrington-O'Shea Career Decision-Making	no	no	no	no	no	no	no	yes	yes	no	no	no
Temperament Survey	no	no	no	yes	no	no	no	no	no	no	no	no
UNIACT Interest Inventory	no	no	no	no	no	yes	yes	no	no	no	no	no
Capacity to input scores from paper-and-pencil administration of standardized instruments ¹⁸												
ACT Career Planning Program	no	no	no	no	no	yes	yes	no	no	no	no	yes
ASSET	no	no	no	no	no	yes	yes	no	no	no	no	no
ASVAB	yes	yes	yes	yes	yes	yes	yes	no	no	yes	no	yes
Career Assessment Inventory	yes	no	no	no	no	yes	yes	yes	yes	no	no	yes
COPS	no	no	no	no	no	yes	yes	no	no	no	no	yes
Differential Aptitude Tests	yes	no	no	no	no	yes	yes	no	no	no	no	yes
GATB	yes	yes	yes	no	yes	no	no	no	no	no	no	no
Harrington-O'Shea CDM	no	no	no	no	no	yes	yes	yes	yes	no	no	yes
Kuder GIS	no	no	no	no	no	yes	yes	no	no	no	no	yes
OVIS II	no	no	no	no	no	yes	yes	no	no	no	no	yes
PLAN	no	no	no	no	no	yes	yes	no	no	no	no	yes
Self-Directed Search	yes	no	no	no	no	yes	yes	yes	yes	no	no	yes
Strong Interest Inventory	yes	no	no	no	no	yes	yes	yes	yes	no	no	yes
UNIACT Interest Inventory	no	no	no	no	no	yes	yes	no	no	no	no	yes
Capacity to deactivate assessment functions as part of the software configuration process	no	yes	yes	yes	no	no	no	no	no	no	no	no

¹⁶ Potentially reduces the amount of time the user spends at the computer.

¹⁷ The user may complete a computer-administered version of a standardized paper-and-pencil instrument.

¹⁸ The user may complete a paper-and-pencil administration of a standardized instrument prior to computer use.

System Content	CIS	CH	CHCT	CLECT	COIN	DCA	DHS	GIS 17	GIS II	KC	SP	VIS
<u>Identifying Occupational Alternatives</u>												
Capacity to select specific variables for identifying occupational alternatives	yes	no	no	no	no	yes	yes	no	no	yes	yes	yes
abilities/skills/activities	yes	yes	yes	no	yes	yes	yes	yes	yes	yes	no	yes
aptitudes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	yes
ASVAB occupation composite	no	yes	yes	no	no	no	no	yes	yes	no	no	no
base occupation	no	no	no	no	no	yes	yes	yes	yes	no	no	yes
branches of military	no	no	no	no	yes	yes	yes	no	no	no	no	yes
COPS/CAPS clusters	yes	yes	yes	yes	yes	yes	yes	yes	yes ¹⁹	yes	yes	yes
education/training	no	yes	yes	no	no	yes	yes	yes	yes ²⁰	yes	yes	yes
employment outlook	no	no	no	yes	no	no	no	no	no	no	no	no
GOE ²¹ numbers	no	no	no	yes	no	no	no	no	no	no	no	no
Holland codes/scores	no	yes	yes	yes	yes	yes	yes	yes	yes	no	no	yes
interests/fields of knowledge	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
military gender restrictions	no	no	no	no	no	yes	yes	yes	yes	no	no	yes
military work tasks	no	no	no	no	no	yes	yes	no	no	yes	no	yes
officer/enlisted status	no	no	no	no	no	yes	yes	yes	yes	no	no	yes
physical demands/danger (specific)	no	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
primary physical activities (general)	yes	yes	yes	no	no	no	no	no	no	yes	no	no
programs of study/majors	no	yes	yes	no	yes	yes	yes	no	no	yes	yes	yes
salary	yes	yes	yes	no	yes	yes	yes	yes	yes	yes	yes	yes
SOC fields of work	no	yes	yes	no	no	no	no	yes	yes	no	no	no
temperaments	yes	yes	yes	yes	no	no	no	yes	yes	yes	no	no
values	yes	no	no	no	no	yes	yes	yes	yes	no	yes	no
working conditions/hours/travel	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	yes
Capacity to identify the number of occupations remaining after entering a search variable	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Capacity to select factors the user wishes to avoid in identifying occupational alternatives	yes	yes	yes	yes	yes	no	no	yes	yes	yes	yes	no
Capacity to determine why a particular occupation does not appear on the user's list	yes	yes	yes	no	no	yes	yes	yes	yes	yes	yes	yes

¹⁹ Capacity to search on 6 employment outlook characteristics for each of the 50 states.

²⁰ Capacity to search on 6 employment outlook characteristics for each of the 50 states.

²¹ GOE = Guide to Occupational Exploration

System Content	CIS	CH	CHCT	CLECT	COIN	DCA	DHS	GIS 17	GIS II	KC	SP	VIS
Capacity to conduct multiple searches in single or multiple files	no	no	no	no	no	no	no	yes	yes	no	no	no
Capacity to deactivate one or more search functions as part of the software configuration process	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	no	yes
<u>Obtaining Occupational Information</u>												
Capacity to compare two occupations on one display/printout	no	yes	yes	yes	yes	yes	yes	no	no	yes	yes	no
Capacity to access occupational titles alphabetically without inputting code numbers	no	yes	yes	no	yes	yes	yes	yes	yes	no	yes	yes
Crosswalk available directly from the occupational file to other information files	yes	no	no	no	no	no	no	yes	yes	no	no	no
Capacity to provide a summary of occupational information in addition to detailed categorical information	no	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	yes
Multiple sources used to develop occupational information	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Cycle for updating of salary & employment outlook data (in months)	12	12	12	12	12	12	12	12	12	var ²²	12	12
Cycle for updating all other occupational information (in months)	12	12	12	12	12	36 ²³	36 ²⁴	24	24	36-48	12	36 ²⁵
Information provided:												
categorical information												
Chrgnicle Brief number	no	no	no	yes	no	no	no	no	no	no	no	no
CIP ²⁶ code	no	yes	yes	no	no	no	no	no	no	no	no	no
DOT number	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	yes
GOE ²⁷ number	no	yes	yes	yes	no	yes	yes	yes	yes	no	no	yes
Holland Code	no	yes	yes	yes	yes	no	no	no	no	no	no	no

²² var = variable

²³ One-third of all occupations are updated each year.

²⁴ One-third of all occupations are updated each year.

²⁵ One-third of all occupations are updated each year.

²⁶ CIP = Classification of Instructional Programs

²⁷ GOE = Guide to Occupational Exploration

System Content	CIS	CH	CHCT	CLECT	COIN	DCA	DHS	GIS 17	GIS II	KC	SP	VIS
OES ²⁸ number	no	yes	yes	no	yes	no	no	yes	yes	no	no	no
SIC ²⁹ code	no	yes	yes	no	yes	no	no	no	no	no	no	no
SOC number/fields of work	no	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	yes
Worker-Trait Group	no	yes	yes	no	no	no	no	no	no	no	no	no
World-of-Work map affiliation	no	no	no	no	no	yes	yes	no	no	no	no	yes
USOE clusters	no	no	no	no	no	no	no	yes	yes	no	no	no
aptitudes required	yes	yes	yes	yes	yes	no	no	yes	yes	yes	no	no
career ladder	no	no	no	no	yes	yes	yes	yes	yes	no	no	yes
definition/description of occupation	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
educational requirements	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
employment outlook	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
fringe benefits	no	no	no	no	yes	no	no	no	no	no	no	no
generic skills required in management	no	no	no	no	no	no	no	no	no	no	yes	no
hiring practices	yes	no	no	no	yes	no	no	no	no	no	no	no
interest fields/likes-dislikes	no	yes	yes	no	yes	yes	yes	yes	yes	yes	yes	yes
military information												
alternative job titles	yes	yes	yes	no	yes	yes	yes	yes	yes	no	no	yes
education/training	yes	yes	yes	no	yes	yes	yes	yes	yes	no	no	yes
employment and promotions	yes	yes	yes	no	yes	no	no	yes	yes	no	no	no
general information on size & organization, location, working for the military, economic situation & outlook	yes	no	no	no	yes	no	no	yes	yes	no	no	no
hiring practices	yes	yes	yes	no	no	no	no	yes	yes	no	no	no
job descriptions	yes	yes	yes	no	yes	yes	yes	yes	yes	no	no	yes
military occupational specialties	yes	yes	yes	no	yes	yes	yes	yes	yes	no	no	yes
physical demands	yes	yes	yes	no	yes	no	no	yes	yes	no	no	no
related training	yes	yes	yes	no	yes	yes	yes	yes	yes	no	no	no
service branches	yes	yes	yes	no	yes	yes	yes	yes	yes	no	no	yes
SOC number	no	yes	yes	no	no	no	no	yes	yes	no	no	no
wages	yes	yes	yes	no	no	no	no	no	no	no	no	no
work setting	yes	yes	yes	no	yes	yes	yes	yes	yes	no	no	yes
necessary tools & equipment	yes	no	no	yes	yes	yes	yes	yes	yes	yes	no	yes
other requirements: experience/licensing/certification	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	yes	yes
personal qualities/temperaments	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes

28 OES = Occupational Employment Statistics
 29 SIC = Standard Industrial Classification

System Content	CIS	CH	CHCT	CLECT	COIN	DCA	DHS	GIS 17	GIS II	KC	SP	VIS
personal values (e.g., contribution to society, leadership, prestige level, leisure, independence, variety, etc.)	no	no	no	yes	no	no	no	no	no	no	yes	no
physical demands	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	yes
promotion/advancement opportunities	no	no	no	no	yes	yes	yes	no	no	no	yes	yes
related information												
apprenticeship programs	yes	no	no	yes	yes	yes	yes	no	no	no	no	yes
educational programs	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	yes
military occupations	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	yes
occupations/specialties	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	no	yes
required college courses/programs of study	yes	no	no	yes	yes	yes	yes	yes	yes	no	yes	yes
salary												
average income	no	no	no	no	yes	yes	yes	yes	yes	yes	yes	yes
beginning income	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	yes	yes
range	yes	yes	yes	yes	yes	yes	yes	no	no	no	yes	yes
top earning possibilities	yes	yes	yes	yes	yes	yes	yes	no	no	no	yes	yes
security	no	no	no	no	yes	yes	yes	yes	yes	no	yes	yes
skills required	yes	no	no	yes	yes	yes	yes	yes	yes	no	yes	yes
suggested high school courses	yes	no	no	yes	yes	yes	yes	yes	yes	no	yes	yes
training pathways/specific occupational training	yes	no	no	no	yes	no	no	yes	yes	yes	no	no
typical job titles	no	yes	yes	yes	yes	yes	yes	yes	yes	no	yes	yes
where to find more information	yes	no	no	no	yes	no	no	yes	yes	no	yes	no
work location/where employed	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	yes	yes
work setting/environment/												
special conditions	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
work tasks/activities	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Capacity to provide state specific info.	yes	yes	yes	no	yes	yes	yes	yes	yes	yes	no	yes
Number of occupations included	325 ³²	778	678	700	340	497	497	489 ³³	489 ³⁴	574	234 +	497
Instructions for making an occupational visit	yes	no	no	no	no	no	no	no	no	no	no	no

³⁰ With the input of ASVAB scores, a military career page number is also supplied.

³¹ High school subjects can be related to occupations.

³² Base number - the total number of occupations will vary depending on the particular state.

³³ 1000 + specialized DOT occupational descriptions

³⁴ 1000 + specialized DOT occupational descriptions

System Content	CIS	CH	CHCT	CLECT	COIN	DCA	DHS	GIS 17	GIS II	KC	SP	VIS
Provides general information on:												
entrepreneurship quiz	yes	no	no	no	no	no	no	no	no	no	no	no
going into business	yes	no	no	no	no	yes	yes	no	no	no	no	yes
list of occupations with												
5% or more self-employment	yes	no	no	no	no	no	no	no	no	no	no	no
making a business succeed	yes	no	no	no	no	no	no	no	no	no	no	no
options	yes	no	no	no	no	no	no	no	no	no	no	no
rewards and costs	yes	no	no	no	no	no	no	no	no	no	no	no
self-employment characteristics												
of entrepreneurs	yes	no	no	no	no	no	no	no	no	no	no	no
where to go for assistance	yes	no	no	no	no	no	no	no	no	no	no	no
why businesses fail	yes	no	no	no	no	no	no	no	no	no	no	no
<u>Identifying Educational Alternatives</u>												
Capacity to complete	yes ³⁵	yes ³⁶	yes	yes	yes ³⁷	yes	yes	yes ³⁸	yes ³⁹	yes ⁴⁰	no	yes
vo/tech school search	yes ⁴¹	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	yes
two-year college search	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	yes
four-year college search	yes	yes	yes	yes	no	yes	yes	yes	yes	yes	yes	no
graduate & professional school search	yes	yes	yes	no	no	yes	yes	yes	no	no	no	yes
external degree program search	no	no	no	no	no ⁴²	yes	yes	no	yes	no	no	yes
financial aid search	yes	yes	yes	yes	yes	no	no	yes	yes	no	no	yes
military training search	no	no	no	yes	no	yes	yes	yes	yes	no	no	yes
Capacity to select specific search variables												
for identifying educational institutions												
academic calendar	no	yes	yes	no	no	yes	yes	yes ⁴⁴	yes ⁴⁵	no	yes ⁴³	yes
activities/special programs	no	yes	yes	no	no	yes	yes	yes	yes	no	no	yes
admissions information	yes	yes	yes	no	no	yes	yes	yes	yes	no	yes	yes

³⁵ Generally includes in-state schools only.

³⁶ For Choices and Choices CT, public and private school search distinctions are possible for all institution types.

³⁷ Separate school search information available depending on major.

³⁸ For each of the 50 states.

³⁹ For each of the 50 states.

⁴⁰ Vo-tech, 2 year, 4 year and graduate school searches are for in-state schools only.

⁴¹ Generally includes in-state schools only.

⁴² Available with the optional CASHE system.

⁴³ Graduate school selector only.

⁴⁴ Includes special program search for students with varying disabilities.

⁴⁵ Includes special program search for students with varying disabilities.

System Content	CIS	CH	CHCT	CLECT	COIN	DCA	DHS	GIS 17	GIS II	KC	SP	VIS
admissions selectivity	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	no	yes
affiliation/control	no	yes	yes	yes	yes	yes	yes	yes	yes	no	yes	yes
athletic programs	no	yes	yes	yes	yes	yes	yes	yes	yes	no	no	yes
athletic scholarships	no	yes	yes	yes	no	yes	yes	yes	yes	no	no	yes
characteristics of students	no	yes	yes	yes	no	yes	yes	yes	yes	no	no	yes
community size/type	yes	yes	yes	no	yes	yes	yes	yes	yes	no	yes	yes
costs and financial aid	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	yes	yes
day/evening/part-time/ full-time programs	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	no	yes
degrees offered	no	yes	yes	no	no	yes	yes	yes	yes	no	yes	yes
enrollment	yes	yes	yes	no	no	yes	yes	yes	yes	no	yes	yes
geographic location	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	yes	yes
housing/residence	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	yes
institution size	no	yes	yes	no	no	yes	yes	yes	yes	no	no	yes
programs of study/majors/fields	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	yes	yes
Capacity to conduct multiple searches in single or multiple files	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	yes	yes
Capacity to evaluate admissions selectivity based on test scores	no	yes	yes	no	no	yes	yes	yes	yes	no	no	yes
Cycle for updating educational information (in months)	12	12	12	12	12	12	12	6	6	12	12	12
Cycle for updating financial aid information (in months)	12	12	12	12	12	12	12	12	12	12	12	12
Obtaining Educational Information ⁴⁶												
Capacity to access educational institutions alphabetically without inputting code numbers	no	yes	yes	no	yes	no	no	yes	yes	no	yes	no
Information provided (apprenticeship programs):												
general information	yes	no	no	no	yes	no	no	no	no	no	no	yes ⁴⁷
programs/sponsors	yes	no	no	no	no	no	no	no	no	no	no	yes
related occupations	yes	no	no	no	no	no	no	no	no	no	no	yes
typical admissions questions	yes	no	no	no	no	no	no	no	no	no	no	yes

⁴⁶ The validity of educational and financial aid information is dependent upon institutional self-report. Therefore, accuracy and currency of the information varies among institutions and systems.

⁴⁷ Information provided is for Maryland schools only.

System Content	CIS	CH	CHCT	CLECT	COIN	DCA	DHS	GIS 17	GIS II	KC	SP	VIS
Information provided (vocational/technical schools):												
academic calendar	yes	no	no	yes	yes	yes	yes	yes	yes	no	no	yes
accreditation	yes	yes	yes	no	no	no	no	yes	yes	no	no	no
admissions selectivity	yes	no	no	yes	yes	no	no	no	no	no	no	no
affiliation/control	no	no	no	no	yes	no	no	yes	yes	no	no	no
alternative credit options	yes	no	no	no	yes	no	no	no	no	no	no	no
application deadline	yes	no	no	no	yes	no	no	no	no	no	no	no
application fee	yes	no	no	yes	yes	no	no	no	no	no	no	no
athletic programs/sports	yes	no	no	no	yes	no	no	yes	yes	no	no	no
athletic scholarships	yes	no	no	no	yes	no	no	no	no	yes	no	no
campus activities (non-sports)	yes	no	no	no	yes	no	no	yes	yes	no	no	no
community size/type	yes	no	no	no	yes	no	no	yes	yes	yes	no	no
contact for further information	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	yes
costs	yes	yes	yes	yes	yes	no	no	yes	yes	yes	no	no
degree requirements	yes	no	no	no	no	yes	yes	no	no	no	no	yes
degrees/certificates offered	yes	no	no	no	no	no	no	yes	yes	no	no	no
distance to city center	yes	no	no	no	no	no	no	no	no	no	no	no
enrollment	yes	no	no	yes	yes	yes	yes	yes	yes	no	no	yes
entrance requirements/tests	yes	no	no	yes	yes	no	no	no	no	no	no	no
faculty characteristics	no	no	no	no	no	no	no	yes	yes	no	no	no
financial aid	yes	no	no	yes	yes	no	no	yes	yes	yes	no	no
foreign study options	yes	no	no	no	yes	no	no	no	no	no	no	no
freshman class characteristics	yes	no	no	no	yes	no	no	yes	yes	no	no	no
honors courses/program	yes	no	no	no	yes	no	no	no	no	no	no	no
housing/residence	yes	no	no	yes	yes	no	no	no	yes	no	no	no
institution/school type	yes	no	no	no	yes	yes	yes	yes	yes	no	no	yes
military training opportunities	no	no	no	no	yes	no	no	no	no	no	no	no
part-time degree programs	yes	no	no	no	no	no	no	no	no	no	no	no
programs of study/majors	yes	yes	yes	no	yes	yes	yes	yes	yes	no	no	yes
special programs/student services	yes	no	no	yes	yes	no	no	yes	yes	no	no	no
student body characteristics	yes	no	no	yes	yes	yes	yes	yes	yes	no	no	yes
Information provided (2 and 4 year colleges):												
academic calendar	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	no	yes
accreditation	yes	yes	yes	no	no	no	no	yes	yes	no	no	no
admissions selectivity	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	no	yes
affiliation/control	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	no	yes
alternative credit options	yes	yes	yes	no	yes	yes	yes	yes	yes	no	no	no
application deadline	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	no	yes

System Content	CIS	CH	CHCT	CLECT	COIN	DCA	DHS	GIS 17	GIS II	KC	SP	VIS
application fee	yes	yes	yes	yes	yes	no	no	no	no	no	no	no
athletic programs/sports	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	no	yes
athletic scholarships	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	yes
campus activities (non-sports)	yes	yes	yes	no	yes	yes	yes	yes	yes	no	no	yes
community size/type	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	no	yes
contact for further information	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	yes
costs	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	yes
degree requirements	yes	no	no	no	no	no	no	no	no	no	no	no
degrees/certificates offered	yes	yes	yes	no	no	yes	yes	yes	yes	no	no	yes
distance to city center	yes	no	no	yes	no	no	no	no	no	no	no	no
employment follow-up data by major	no	no	no	no	no	no	no	yes	yes	no	no	no
enrollment	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	no	yes
entrance requirements/tests	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	no	yes
faculty characteristics	no	no	no	no	no	no	no	yes	yes	no	no	no
financial aid	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	yes
foreign study options	yes	yes	yes	no	yes	yes	yes	yes	yes	no	no	yes
freshman class characteristics	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	no	yes
honors courses/program	yes	yes	yes	no	yes	yes	yes	yes	yes	no	no	yes
housing/residence	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	no	yes
institution/school type	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	no	yes
military training opportunities	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	no	yes
part-time degree programs	yes	no	no	no	yes	yes	yes	yes	yes	no	no	yes
programs of study/majors	yes	yes	yes	no	yes	yes	yes	yes	yes	no	no	yes
special programs/student services	yes	yes	yes	no	yes	yes	yes	yes	yes ⁴⁸	no	no	yes
student body characteristics	yes	yes	yes	yes	yes	yes	yes	yes	yes ⁴⁹	no	no	yes
Information provided (graduate schools):												
academic calendar	yes	yes	yes	no	no	yes	yes	yes	yes	no	yes ⁵⁰	no
accreditation	yes	yes	yes	no	no	no	no	yes	yes	no	yes	no
admissions selectivity	yes	yes	yes	no	no	yes	yes	yes	yes	no	yes	no
affiliation/control	yes	yes	yes	no	no	yes	yes	yes	yes	no	yes	no
alternative credit options	yes	no	no	no	no	yes	yes	yes	yes	no	no	no
application deadline	yes	yes	yes	no	no	no	no	yes	yes	no	yes	no
application fee	yes	no	no	no	no	no	no	yes	yes	no	yes	no
athletic programs/sports	yes	no	no	no	no	no	no	no	no	no	yes	no
athletic scholarships	yes	no	no	no	no	no	no	yes	yes	no	no	no
campus activities (non-sports)	yes	no	no	no	no	no	no	yes	yes	no	no	no

⁴⁸ Includes special program search for students with varying disabilities.

⁴⁹ Includes special program search for students with varying disabilities.

⁵⁰ Optional Graduate school selector only.

System Content	CIS	CH	CHCT	CLECT	COIN	DCA	DHS	GIS 17	GIS II	KC	SP	VIS
community size/type	yes	yes	yes	no	no	yes	yes	yes	yes	no	yes	no
contact for further information	yes	yes	yes	no	no	yes	yes	yes	yes	no	yes	no
costs	yes	yes	yes	no	no	yes	yes	yes	yes	no	yes	no
degree requirements	yes	no	no	no	no	yes	yes	no	no	no	yes	no
degrees offered	yes	yes	yes	no	no	yes	yes	yes	yes	no	yes	no
distance to city center	yes	no	no	no	no	yes	yes	yes	yes	no	yes	no
enrollment	yes	yes	yes	no	no	no	no	no	no	no	no	no
entrance requirements/tests	yes	yes	yes	no	no	yes	yes	yes	yes	no	yes	no
faculty characteristics	no	yes	yes	no	no	yes	yes	yes	yes	no	no	no
financial aid	yes	yes	yes	no	no	yes	yes	yes	yes	no	yes	no
foreign study options	yes	no	no	no	no	no	no	yes	yes	no	no	no
freshman class characteristics	yes	no	no	no	no	no	no	yes	yes	no	no	no
honors courses/program	no	no	no	no	no	no	no	yes	yes	no	no	no
housing/residence	yes	yes	yes	no	no	yes	yes	yes	yes	no	yes	no
institution/school type	yes	yes	yes	no	no	yes	yes	yes	yes	no	yes	no
job placement statistics	no	no	no	no	no	yes	yes	yes	yes	no	yes	no
military training opportunities	no	no	no	no	no	yes	yes	yes	yes	no	no	no
part-time degree programs	no	no	no	no	no	no	no	yes	yes	no	no	no
programs of study/majors	yes	yes	yes	no	no	yes	yes	yes	yes	no	yes	no
special programs/student services	yes	yes	yes	no	no	yes	yes	yes	yes	no	yes	no
starting salary of graduates	no	no	no	no	no	no	no	yes	yes	no	no	no
student body characteristics	yes	yes	yes	no	no	yes	yes	yes	yes	no	yes	no
Information provided												
(external degree programs):												
accreditation	no	no	no	no	no	yes	yes	no	no	no	no	yes
alternative credit options	no	no	no	no	no	yes	yes	no	no	no	no	yes
contact for further information	no	no	no	no	no	yes	yes	no	no	no	no	yes
costs	no	no	no	no	no	yes	yes	no	no	no	no	yes
degrees/certificates offered	no	no	no	no	no	yes	yes	no	no	no	no	yes
enrollment	no	no	no	no	no	yes	yes	no	no	no	no	yes
entrance requirements/tests	no	no	no	no	no	yes	yes	no	no	no	no	yes
financial aid	no	no	no	no	no	yes	yes	no	no	no	no	yes
programs of study/majors	no	no	no	no	no	yes	yes	no	no	no	no	yes
special programs/student services	no	no	no	no	no	yes	yes	no	no	no	no	yes
Application/financial aid												
request letter generator	no	no	no	yes	yes	no	no	no	no	no	no	no
Assessment of financial aid need ⁵¹	no	no	no	no	no	yes	yes	no	no	no	no	no

⁵¹ For DCA and DHS, completion of forms prior to computer use is required.

System Content	CIS	CH	CHCT	CLECT	COIN	DCA	DHS	GIS 17	GIS II	KC	SP	VIS
General information provided on financial aid												
application materials	yes	yes	yes	no	yes ⁵²	no	no	no	no	no	no	no
books about financial aid	yes	no	no	no	yes	no	no	no	no	no	no	no
glossary of financial aid terms	yes	no	no	yes	yes	no	no	no	no	no	no	no
sources of financial aid												
aid for military												
personnel/dependents	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	yes
grants	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
loans	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
private & special programs	yes	yes	yes	yes	yes	yes	yes	yes	yes	no	no	yes
work programs	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
steps for getting financial aid	yes	yes	yes	yes	yes	no	no	no	no	no	no	no
Capacity to plan a high school curriculum on the basis of educational & career goals	yes ⁵³	no	no	no	no	no	no	no	no	no	no	no
Capacity to compare 2 or more schools on one screen	yes	no	no	no	yes	no	no	no	no	no	no	no
Overview of nontraditional approaches to education	no	no	no	no	no	yes	yes	no	no	no	yes	yes
General descriptions of programs of study	yes	no	no	yes	yes	yes	yes	yes	yes	yes	yes	yes
Typical generic curriculum (listing of courses)	no	no	no	yes	yes	no	no	no	no	no	yes	no
Description of work tasks to encourage learning by doing	no	no	no	no	no	no	no	no	no	no	yes	no
User estimation of chances of successfully completing a preparation program	no	no	no	no	no	no	no	no	no	no	yes	no
Development of an educational action plan	no	no	no	no	no	yes	yes	no	no	no	yes	no
Number of specific educational & training institutions described	3700 ⁵⁴	4500 + 4500 ⁵⁵	7200 + 3200 + 6746	6746	14657	14657	120 + 800	5191				
Number of specific financial aid programs/sources described ⁵⁶	1100 ⁵⁷	400 + 400 + 850 + 14K ⁵⁸	24	24	700 + 700 + 14	6	24 + 24 +					

⁵² Financial aid information is optional with the CASHE system.

⁵³ Optional High School Planner for states to purchase. Requires local data entry.

⁵⁴ Includes 2 and 4 year information. Additional information provided by state computer-based CIDS.

⁵⁵ 4500 + with optional educational file.

⁵⁶ Developers define financial aid information in a variety of ways, resulting in considerable variance in the number of financial sources reported.

⁵⁷ Additional information provided by state computer-based CIDS.

System Content	CIS	CH	CHCT	CLECT	COIN	DCA	DHS	GIS 17	GIS II	KC	SP	VIS
<u>Coping With Adult Transitions</u>												
Understanding adult transitions	no	no	no	no	no	yes	no	no	no	no	no	no
Understanding life-career roles	no	no	no	no	no	yes	no	no	no	no	no	no
General information on:												
calculating preparation costs	no	no	no	no	no	no	no	no	no	no	yes	no
care for adults	no	no	no	no	no	no	no	no	no	no	yes	no
child care	yes	no	no	no	no	no	no	no	no	no	yes	no
credit for military training	no	no	no	no	no	yes	yes	no	no	no	yes	yes
credit for prior learning	no	no	no	no	no	yes	yes	no	no	no	yes	yes
credit via examination	no	no	no	no	no	yes	yes	no	no	no	yes	yes
internship/co-op placement	no	no	no	no	no	no	no	no	no	no	yes	no
financial aid	yes	no	no	no	no	yes	yes	yes	yes	no	yes	yes
finding accredited home-study courses	no	no	no	no	no	no	no	no	no	no	yes	no
time management	no	no	no	no	no	no	no	no	no	no	yes	no
Capacity to analyze work history by DOT number in terms of:												
aptitudes	no	no	yes	no	no	no	no	no	no	no	no	no
crosswalks (CIP,DOT,GOE,OES,SIC)	yes	no	yes	no	no	no	no	no	no	no	no	no
earnings	no	no	yes	no	no	no	no	no	no	no	no	no
educational level	no	no	yes	no	no	no	no	no	no	no	no	no
employment outlook	no	no	yes	no	no	no	no	no	no	no	no	no
Holland types	no	no	yes	no	no	no	no	no	no	no	no	no
hours and travel	no	no	yes	no	no	no	no	no	no	no	no	no
interests	no	no	yes	no	no	no	no	no	no	no	no	no
physical demands	no	no	yes	no	no	no	no	no	no	no	no	no
primary physical activity	no	no	yes	no	no	no	no	no	no	no	no	no
SOC fields of work	no	no	yes	no	no	no	no	no	no	no	no	no
temperaments	no	no	yes	no	no	no	no	no	no	no	no	no
worksite/environment	no	no	yes	no	no	no	no	no	no	no	no	no
Capacity for a counselor to input specific comments into a user's printout	no	yes	yes	no	no	no	no	no	no	no	no	no

58 14,000 + with optional financial aid files.

59 Data used as input for occupational exploration.

System Content	CIS	CH	CHCT	CLECT	COIN	DCA	DHS	GIS 17 GIS II	KC	SP	VIS
<u>Decision Making</u>											
On-line description of a career decision-making model	no	no	no	no	no	yes	yes	no	no	yes	no
Integration of summary data from all other system modules into the decision-making module	no	no	no	no	no	no	no	no	no	yes	no
Integration of 3 occupational alternatives into a decision-making matrix that balances potential rewards & chances of successfully completing preparation requirements, for the purpose of identifying a tentative choice	no	no	no	no	no	no	no	no	no	yes	no
Feedback to the user regarding the characteristics of her or his tentative choice based on a decision-making matrix	no	no	no	no	no	no	no	no	no	yes	no
<u>Employment Planning</u>											
General information on:											
books to help in the job search	yes	no	no	no	no	no	no	no	no	no	no
building a network of contacts	yes	no	no	no	no	yes	yes	no	no	yes	yes
demonstrating job skills or job search skills	no	no	no	no	no	yes	yes	no	no	yes	yes
employee benefits	yes	no	no	no	no	no	no	no	no	no	no
employer expectations	yes	no	no	no	no	no	no	no	no	no	no
employment advertisements	no	no	no	no	no	yes	yes	no	no	no	yes
employment laws & regulations	yes	no	no	no	no	no	no	no	no	no	no
entrepreneurship/start your own business	yes	no	no	no	no	yes	yes	no	no	no	yes
how to research firms & jobs	yes	no	no	no	no	no	no	no	no	no	no
job applications	yes	no	no	no	no	yes	yes	no	no	no	yes
job interviewing	yes	no	no	no	no	yes	yes	no	no	no	yes
letter writing	yes	no	no	no	no	yes	yes	no	no	no	yes
placement agencies	no	no	no	no	no	yes	yes	no	no	no	yes
planning/implementing a job search	yes	no	no	no	no	yes	yes	no	no	no	yes
resume writing	yes	no	no	no	no	yes	yes	no	no	yes	yes
support services for job seekers	yes	no	no	no	no	yes	yes	no	no	yes	yes
use of Myers-Briggs Type Indicator for employment planning	yes	no	no	no	no	no	no	no	no	no	no
work-related family issues	no	no	no	no	no	yes	yes	no	no	no	no
yes	yes	no	no	no	no	no	no	no	no	no	no

System Content	CIS	CH	CHCT	CLECT	COIN	DCA	DHS	GIS 17	GIS II	KC	SP	VIS
Cover letter practice exercise	no	no	no	no	no	yes	yes	no	no	no	no	yes
Identifying options for developing new skills	no	no	no	no	no	no	no	no	no	no	yes	no
Identifying next steps in achieving career goals	no	no	no	no	no	no	no	no	no	no	yes	no
Overview of how to prepare & skills required for specific occupations	no	no	no	no	no	yes	yes	no	no	no	yes	yes
Writing a resume draft	no	no	no	no	no	yes	yes	no	no	no	no	yes
<u>User Exit</u>												
Report/review of all system modules												
current session	no	yes ⁶⁰	yes	no	no	yes	yes	no	no	yes ⁶¹	yes	no
sessions completed to date	no	yes	yes	no	no	yes	yes	no	no	no	yes	no
Identifying occupations to be maintained in the user record	no	yes	yes	yes	no	yes	yes	no	no	no	no	no
Completing a brief on-line anonymous evaluation questionnaire (optional)	no	no	no	no	no	yes	yes	no	no	no	yes	yes
<u>Local Data Option</u>												
Capacity to integrate local data into the system	yes	yes	yes	no	yes	yes	yes	yes	yes	no	yes	no
Capacity to customize introductory display following sign-on	yes	yes	yes	no	yes	yes	yes	yes	no	no	no	no
Capacity to customize exit display	yes	yes	yes	no	no	yes	yes	no	no	no	yes	no

60 The printed summary is optional.

61 The printed summary is optional.

Table 2

Comparison of User Friendly Features¹

User Friendly Features	CIS	CH	CHCT	CLECT	COIN	DCA	DHS	GIS 17	GIS II	KC	SP	VIS
Full spectrum color scheme video displays ²	yes ³	no	yes ⁴	no	yes	no	no	no	yes	no	yes	no
Analogous color scheme video displays	no	yes	yes	no	yes	yes	yes	no	no	yes	no	yes
System content color-coded ⁵	no	no	no	no	yes	no	no	no	no	yes	yes	no
Multi-colored graphic-enhanced screen displays												
entry screen graphics	no	yes	yes	yes	yes	yes	yes	no	yes	no	yes	yes
main program	no	yes	yes	no	yes	yes	yes	no	yes	yes	yes	yes
menus/program manager	no	yes	yes	no	yes	yes	yes	no	yes	no	yes	yes
Upper/lower case characters	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Operates in a windows-like environment	no	no	no	no	no	no	no	no	yes ⁶	no	no	no
Special purpose function/alt keys												
back-up function	yes	Esc ⁷	Esc	yes	yes	yes	yes	yes	yes	Esc	yes	yes
locate position in the system	no	no	no	no	no	yes	yes	yes	yes	no	no	yes
previous item back-up (on-line assessment instruments only)												
print screen	yes	no	no	no	no	yes	yes	yes	yes	no	no	yes
quick exit	no	yes	yes	yes	yes	yes	yes	yes	no	yes	yes	yes
repeat instructions/help	no	Esc	Esc	no	yes	yes	yes	yes	yes	no	yes	yes
Orientation to function keys	yes	yes	yes	no	yes	yes	yes	yes	yes	no	no	yes
Menu driven screen sequencing	no	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Screen indicates system location	no	yes	yes	no	yes	no	no	yes	yes	no	no	no

¹ Assumes United States software versions on IBM compatible microcomputers unless otherwise noted. Response time after data input varies among computers depending on type of processor, clock speed, memory available, hard disk access speed, and local area network capabilities.

² Video display (monitor) screen resolution (sharpness) varies with different monitors and interfaces, with Super VGA, VGA, and EGA formats providing better resolution than CGA formats.

³ Limited to a blue background for all displays and green headings for selected displays.

⁴ Transferable skills module only

⁵ Color coding of instruction/error messages and display backgrounds to match system content.

⁶ Mouse driven or keyboard driven input

⁷ Esc = Escape (Esc) key provides this function

User Friendly Features	CIS	CH	CHCT	CLECT	COIN	DCA	DHS	GIS 17	GIS II	KC	SP	VIS
Main menu indicates completed components/modules	no	no	no	no	no	yes	yes	no	no	no	no	no
Preliminary operating instructions	yes	yes	yes	yes	no	yes	yes	no	yes ⁸	yes	yes	yes
Explicit recommended pathway for use of system based on user characteristics	no	no	no	no	no	yes	yes	no	no	no	yes	no
Staff quick access to system content	no	yes	yes	no	no	yes	yes	no	no	no	no	yes
Introductory instructions omitted for experienced users	no	yes	yes	no	no	yes	yes	yes	yes	no	yes	no
Purpose of each component/module explained	no	yes	yes	yes	no	yes	yes	yes	yes ⁹	yes	yes	no
Name added to printouts	yes	yes	yes	yes	yes	no	no	yes	yes	yes	yes	no
Date added to printouts	no	yes	yes	no	yes	no	no	yes	yes	yes	yes	no
Availability of optional detailed information (layering, e.g. expanded definitions of terms)	no	no	no	no	yes	no	no	yes	yes	no	yes	no
Summary screen display/printout for each component/module	yes ¹⁰	yes	yes	yes	no	yes	yes	yes ¹¹	yes ¹²	yes	yes	no
for each completed session or to date	no	yes	yes	no	no	yes	yes	no	no	no	yes	no
User memory record (system capability to store user data between sessions)	no	yes	yes	yes	no	yes	yes	no	no	no	yes	no
User data maintenance capabilities	no	yes	yes	yes	no	yes	yes	no	no	no	yes	no
user data delete option	no	yes	yes	yes	no	yes	yes	no	no	no	yes	no
password protection for user data ¹³	no	yes	yes	yes	no	yes	yes	no	no	no	yes	no
Data collection for accountability & research												
data on system use	yes	yes	yes	yes	no	yes	yes	yes	yes	no	yes	yes
aggregate	no	no	no	yes	no	yes	yes	no	no	no	no	no
individual												

8 Optional

9 Also automatically prints organizational addresses when requested.

10 Summary provided only following completion of Quest, School Sort, and Assessment Link.

11 Summary provided only following completion of the Harrington-O'Shea CDM.

12 Summary provided only following completion of the Harrington-O'Shea CDM.

13 Uses private number or social security number in place of password (CLECT, DISCOVER for Colleges and Adults, DISCOVER for High Schools, and SIGI PLUS).

User Friendly Features	CIS	CH	CHCT	CLECT	COIN	DCA	DHS	GIS 17	GIS II	KC	SP	VIS
demographic data												
aggregate	no	no	no	no	no	yes	yes	no	no	no	yes	yes
individual	no	no	no	yes	no	yes	yes	no	no	no	no	no
user satisfaction data	no	no	no	no	no	yes	yes	no	no	no	yes	yes
Integration of user data from												
one component/module into												
another component/module	no	no	no	no	no	yes	yes	no	no	no	yes	no
Mainframe version available	yes	no	no	no	no	no	no	yes	no	no	no	no
Apple Macintosh version available	no	yes	yes	no	no	no	no	no	yes	no	no	no
Apple II version available	no	no	no	yes	no	no	no	yes	no	yes	no	no
CD-ROM version available	no	no	no	no	yes	no	no	no	no	no	no	no

Table 3

Comparison of Support Materials and Services Available from Developers

Support Materials & Services	CIS	CH	CHCT	CLECT	COIN	DCA	DHS	GIS 17	GIS II	KC	SP	VIS
<u>Support Materials for Users</u>												
Nonconsumable materials												
user guide/handbook	no	yes	yes	yes	no	yes	yes	yes	yes	yes	yes	yes
lists of occupations ¹	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes ²	yes	yes
alphabetical	no	no	no	yes	no	no	no	no	no	no	no	no
apprenticed occupations	yes	no	no	no	yes	yes	yes	no	no	no	no	no
career fields/occupational groups	yes	no	no	no	yes	yes	yes	no	no	no	no	no
DOT numbers	no	no	no	yes	no	no	no	yes	yes	no	no	no
high tech occupations	no	no	no	no	no	no	no	no	no	no	no	yes
military titles	yes	yes	yes	no	no	yes	yes	yes	yes	yes	no	yes
new & emerging occupations	no	no	no	no	no	no	no	no	no	no	no	yes
SOC - fields of work	no	yes	yes	no	no	no	no	no	no	no	no	no
USOE clusters	no	no	no	no	no	no	no	yes	yes	no	no	no
worker-trait groups (GOE)	no	yes	yes	no	no	no	no	no	no	no	no	no
lists of institutions												
combined list of all levels	yes	yes	yes	yes	no	no	no	no	no	yes	no	no
combined list by region/state	yes	yes	yes	yes	no	no	no	no	no	yes	no	no
vocational/technical schools	yes	no	no	yes	no	yes	yes	yes	yes	yes	no	yes
two-year colleges	yes	no	no	yes	no	yes	yes	yes	yes	yes	no	yes
four-year colleges	yes	no	no	yes	no	yes	yes	yes	yes	yes	no	yes
graduate schools	yes	no	no	no	no	yes	yes	yes	yes	no	no	no
external degree schools	no	no	no	no	no	yes	yes	no	no	no	no	yes
lists of programs												
apprenticeship programs	no	no	no	no	no	no	no	no	no	no	no	yes
CIP code	no	no	no	no	no	no	no	no	no	yes	no	no
combined list of all levels	yes	yes	yes	no	yes	no	no	no	no	no	no	no
external degree programs	no	no	no	no	no	yes	yes	no	no	no	no	yes
military programs	no	yes	yes	no	no	yes	yes	no	no	no	no	yes

¹ Features receiving a "yes" for Choices and Choices CT can be printed from the on-line version of the professional manual. A printed version is available upon request.

² DOT number available

Support Materials & Services	CIS	CH	CHCT	CLECT	COIN	DCA	DHS	GIS 17	GIS II	KC	SP	VIS
vocational/technical programs	no	no	no	yes	no	yes	yes	yes	yes	no	no	yes
list of financial aid sources	yes	no	no	yes	no	no	no	yes	yes	no	no	yes
working for yourself	yes	no	no	no	no	no	no	no	no	no	no	no
poster - quick reference												
for system operation	yes	no	no	no	no	yes	yes	yes	yes	no	no	no
poster - World-of-Work map	no	no	no	no	no	yes	yes	no	no	no	no	no
poster - life-career rainbow	no	no	no	no	no	yes	no	no	no	no	no	no
quick reference card												
for system operation	no	no	no	no	no	no	no	yes	yes	yes	no	no
quick reference card												
for function keys	no	yes	yes	no	no	yes	yes	no	no	no	yes	yes
Consumable materials												
user guide/handbook	yes	yes	yes	no	no	no	no	no	no	yes	yes	no
Harrington-O'Shea CDM												
interpretive folder	no	no	no	no	no	no	no	yes	yes	no	no	no
printout checklist	no	no	no	no	no	no	no	no	no	no	yes	no
post-system use guide	no	no	no	no	no	no	no	no	no	no	yes	no
temperament survey	no	no	no	yes	no	no	no	no	no	no	no	no
workbook (assessment and												
action planning)	no	no	no	no	no	yes	yes	no	no	no	no	yes

Support Materials for Institutions

Bibliography

Supplemental information resources	yes	yes	yes	no	no	yes	yes	no	no	no	yes	yes
System design/use references	yes	yes	yes	no	no	yes	yes	no	no	no	yes	yes
Manual												
Publication date ³	1992	1993	1993	1992	1992	1993	1993	1992	1992	1992	1990	1992
Professional/paraprofessional												
administrative/research reports	no	yes	yes	yes	no	yes	yes	no	no	no	yes	yes
case study examples	no	yes	yes	no	no	no	no	no	no	no	yes	no
counselor/paraprofessional												
training materials	yes	yes	yes	no	no	no	no	no	no	no	no	no
overhead transparency/												
handout masters	yes	yes	yes	no	no	no	no	no	no	no	no	no
counseling process	yes	yes	yes	no	no	yes	yes	no	no	no	yes	yes

³ Dates may indicate supplemental revisions as opposed to complete manual revision.

Support Materials & Services	CIS	CH	CHCT	CLECT	COIN	DCA	DHS	GIS 17	GIS II	KC	SP	VIS
crosswalk documents/tables	yes	yes	yes	no	no	no	no	no	no	yes	no	no
database/development procedures												
educational information sources	yes	yes	yes	no	yes	yes	yes	yes	yes	yes	no	yes
financial aid sources	yes	no	no	no	no	yes	yes	yes	yes	no	no	yes
occupational information sources	yes	yes	yes	no	yes	yes	yes	yes	yes	yes	yes	yes
important phone numbers	yes	yes	yes	yes	yes	yes	yes	no	no	yes	no	yes
instructions for use with												
special populations	yes	yes	yes	yes	no	no	no	no	no	no	no	no
license agreement	no	no	no	no	no	yes	yes	no	no	no	no	yes
recommendations for integrating the												
software into service delivery												
counselor attitudes	yes	yes	yes	no	no	yes	yes	no	no	no	no	no
pre-system use client preparation	yes	yes	yes	yes	no	yes	yes	no	no	no	yes	no
post-system use intervention	no	yes	yes	no	no	no	no	no	no	no	yes	no
materials for curriculum integration	yes	yes	yes	no	no	no	no	yes	yes	no	no	no
sample activities	yes	yes	yes	no	no	yes	yes	no	no	no	no	yes
sample service delivery forms	yes	yes	yes	no	no	yes	yes	no	no	no	yes	yes
standards for system use	yes	yes	yes	yes	no	no	no	no	no	no	no	no
statement of system relationship												
to NOICC standards	no	yes	yes	yes	no	no	no	no	no	no	no	no
system design process	yes	yes	yes	yes	no	no	no	no	no	no	yes	no
system overview												
component/module overview	yes	yes	yes	no	yes	yes	yes	yes	yes	no	yes	yes
overview of pathways/routes	yes	yes	yes	no	yes	yes	yes	no	no	no	yes	yes
system/feature updates	no	yes	yes	no	yes	yes	yes	no	no	no	yes	yes
theoretical basis for system												
design/use	no	yes	yes	yes	no	yes	yes	no	no	no	yes	yes
training by component/module	yes	yes	yes	no	no	yes	yes	no	no	no	yes	no
use of system-related												
assessment inventories	yes	yes	yes	no	no	yes	yes	no	no	no	yes	no
user characteristics for												
counselor awareness	yes	yes	yes	no	no	no	no	no	no	no	yes	no
user needs and system use options	yes	yes	yes	no	no	yes	yes	no	no	no	yes	yes
using printouts in counseling	yes	yes	yes	no	no	no	no	no	no	no	yes	no
Site administrator												
choosing the best location	yes	yes	yes	no	no	yes	yes	no	no	no	yes	yes
scheduling	no	yes	yes	no	no	no	no	no	no	no	no	no
selecting/training direct service												
providers	yes	yes	yes	no	no	no	no	no	no	no	no	no

Support Materials & Services	CIS	CH	CHCT	CLECT	COIN	DCA	DHS	GIS 17	GIS II	KC	SP	VIS
system implementation/integration processes	yes	yes	yes	no	no	yes	yes	no	no	no	no	yes
system promotion to staff	yes	yes	yes	no	no	no	no	no	no	no	no	no
Technical												
installation instructions	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
localization instructions	yes	yes	yes	no	yes	yes	yes	no	no	yes	yes	no
operating instructions	yes	yes	yes	no	yes	yes	yes	yes	no	no	no	yes
procedures for demonstration	no	yes	yes	no	no	no	no	no	no	no	yes	no
technical service request procedures	yes	no	no	yes	no	yes	yes	no	no	no	no	yes
trouble shooting	yes	yes	yes	yes	no	no	no	yes	yes	no	yes	no
Newsletter												
Information/updates	no	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Research & development	no	yes	yes	no	yes	yes	yes	yes	yes	no	yes	yes
Videotape												
Publication date	no	1992	1992	no	no	1986	1986	1991	1993	no	1992	no
Assessment inventories	no	no	no	no	no	yes	yes	no	no	no	no	no
Career stages/development	no	yes	yes	no	no	no	no	no	no	no	no	no
Content overview ⁴	no	yes	yes	no	no	yes	yes	yes	yes	no	yes	no
Counseling scenarios	no	yes	yes	no	no	yes	yes	yes	yes	no	yes	no
Counselor training	no	yes	yes	no	no	yes	yes	yes	yes	no	yes	no
Daily operating procedures	no	yes	yes	no	no	yes	yes	no	no	no	no	no
Database/development procedures												
information update cycle	no	yes	yes	no	no	no	no	yes	yes	no	no	no
educational information sources	no	yes	yes	no	no	no	no	no	no	no	no	no
financial aid sources	no	yes	yes	no	no	no	no	no	no	no	no	no
occupational information sources	no	yes	yes	no	no	no	no	no	no	no	no	no
Demonstration of installation procedures	no	no	no	no	no	yes	yes	no	no	no	no	no
Integrating of software into												
counseling services	no	yes	yes	no	no	yes	yes	yes	yes	no	yes	no
Localization procedures	no	yes	yes	no	no	yes	yes	no	no	no	no	no
Potential settings for system use	no	yes	yes	no	no	no	no	no	no	no	no	no
Review of support materials/guides	no	yes	yes	no	no	no	no	no	yes	no	no	no
Simulated computer screens used for												
system demonstration	no	yes	yes	no	no	yes	yes	no	yes	no	no	no
System promotion for staff/potential users	no	yes	yes	no	no	no	no	no	yes	no	no	no

⁴ For Choices/Choices CT videotape, content overview is color-coded to differentiate IBM and Macintosh computer systems.

Support Materials & Services	CIS	CH	CHCT	CLECT	COIN	DCA	DHS	GIS 17	GIS II	KC	SP	VIS
Technical support number	no	yes	yes	no	no	yes	yes	yes	yes	no	no	no
Theoretical basis of software	no	yes	yes	no	no	yes	yes	no	no	no	yes	no
Using counselor/administrative reports	no	yes	yes	no	no	no	no	no	no	no	no	no
<u>Demonstration Resources</u>												
Demonstration disk or demonstration video for software evaluation and/or public relations	yes	yes	yes	no	yes	yes	yes	yes	yes	no	yes	no
<u>Counselor/Administrator Reports</u>												
Identification of users	no	yes	yes	yes	no	yes	yes	no	no	no	no	no
User characteristics	no	yes	yes	no	no	yes	yes	no	no	no	yes	no
Use of system components	yes	yes	yes	no	no	yes	yes	yes	yes	no	yes	yes
User evaluation of the system	no	no	no	no	no	yes	yes	no	no	no	yes	yes
Total profile of system use by component/module	yes	yes	yes	no	no	yes	yes	no	no	no	yes	no
<u>Technical Support for Institutions by Phone</u>												
	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
<u>Training from the Developer</u>												
On-site training	yes ⁵	yes	yes	no	yes	yes	yes	yes	yes	no	yes	yes
National/regional/state conferences	yes	yes	yes	no	yes	yes	yes	yes	yes	yes	yes	yes

5 Training varies by state.

5J

6J

Table 4

Comparison of Costs¹

Feature	CIS	CH	CHCT	CLECT	COIN	DCA	DHS	GIS 17	GIS II	KC	SP	VIS
Software License (1 year) System ²	8503	11504	13505	9006	9957	18508	18509	195010	195011	45012	147513	52514

- ¹ Some costs are constant across all systems, such as hardware and hardware maintenance; supplemental career information resources; supplies (paper & printer supplies); facilities (physical renovation and computer furniture, if necessary); staff time necessary for developing and inputting local occupational, educational, and service delivery information, and developing organization-specific support materials; and conference travel expenses related to staff training. Appropriate constant costs should be included in any calculation of total CACG expenses for an organization.
- ² Only features where costs apply are included in this table. Refer to Table 3 for a complete listing of all support materials and services that are available from the developers.
- ³ Average estimated cost per site for CIS States. This excludes the cost of the optional High School Curriculum Planner.
- ⁴ Unlimited site license within one institution. \$985 annually for three year license. Volume and state discounts are available. Negotiated lower prices for large multi-site contracts are possible.
- ⁵ \$1100 annually for three year license. Volume and state discounts are available. Unlimited site license within one institution. Negotiated lower prices for large multi-site contracts are possible.
- ⁶ CLECT is purchased, as opposed to being leased. Selected modules may be purchased as follows: Occupational Search Module = \$200; Occupational Information Module = \$250; College Module = \$200; Vocational School Module = \$200; Financial Aid Module = \$200. Modules 1 and 2 must be of the same edition to function appropriately. Volume discounts are available.
- ⁷ Unlimited site license within one institution. Discounts may be available for states and multi-site contracts. \$40 per additional computer up to \$1195. Includes the cost of the CASHE system
- ⁸ Second system at one site = \$1150; third system at one site = \$600; additional systems - no fee. Single copies of user and system support materials provided with system lease. Additional copies available at extra cost from the developer or by user reproduction.
- ⁹ Second system at one site = \$1150; third system at one site = \$600; additional systems - no fee. Single copies of user and system support materials provided with system lease. Additional copies available at extra cost from the developer or by user reproduction.
- ¹⁰ Unlimited site license within one institution. Volume and state discounts are available. Negotiated lower prices for large multi-site contracts are possible. No additional cost for networks.
- ¹¹ Unlimited site license within one institution. Volume and state discounts are available. Negotiated lower prices for large multi-site contracts are possible. No additional cost for networks.
- ¹² Minimum system cost. Maximum system cost = \$1500. Actual fee based on a \$2 per student per school building, and \$50 training administrative fee. Discounts are available.
- ¹³ 2 year lease = \$1275; 3 year lease = \$1175; each additional system = \$875 per year.
- ¹⁴ State discounts are available.

Feature	CIS	CH	CHCT	CLECT	COIN	DCA	DHS	GIS 17	GIS II	KC	SP	VIS
<u>Support Materials</u>												
Consumable (assumes 500 users per year) ¹⁵	nc ¹⁶	355 ¹⁷	355 ¹⁸	na ¹⁹	na	na	na	na	na	na	nc	na
user guide												
Harrington-O'Shea CDM	na	na	na	na	na	na	na	300 ²⁰	300 ²¹	na	na	na
interpretative folder	na	na	na	372 ²²	na	na	na	na	na	na	na	na
temperament survey												
<u>Technical Support</u>	800#	800#	800#	800#	800#	800#	800#	800#	800#	pc ²³	800#	800#
<u>Training from the Developer</u>												
National/regional conference/ ²⁴	nc	nc	nc	na	nc	nc	nc	nc	nc	nc	45	nc
workshop registration fee ²⁴												
<u>SUB-TOTAL COSTS</u>												
One year software license	\$850	\$1150	\$1350	\$900	\$995	\$1850	\$1850	\$1950	\$1950	\$450	\$1475	\$525
<u>Optional costs without constants</u>												
consumable support materials ²⁵	\$0	\$355	\$355	\$372	\$0	\$0	\$0	\$300	\$300	\$0	\$0	\$0
conference registration fees ²⁶	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$45	\$0
subtotal	\$0	\$355	\$355	\$372	\$0	\$0	\$0	\$300	\$300	\$0	\$45	\$0
<u>TOTAL COSTS</u>	\$850	\$1505	\$1705	\$1272	\$995	\$1850	\$1850	\$2250	\$2250	\$450	\$1520	\$525

¹⁵ These costs tend to be ongoing each year and vary with the number of users. This analysis assumes 500 users per year.

¹⁶ nc = No charge

¹⁷ Includes 500 Choices profiles at \$25 per 50 = \$250 plus 90 reusable Choices guides at \$35 per 30 = \$105 for both Choices and Choices CT. This assumes that 90 guides are necessary to effectively use 500 profiles.

¹⁸ See previous footnote.

¹⁹ na = Not available from the developer at this time.

²⁰ Optional cost (\$15 per 25 copies)

²¹ Optional cost (\$15 per 25 copies)

²² Optional cost (\$21.90 per 30 copies)

²³ pc = Phone charges apply for long distance calls

²⁴ Optional cost (where fees apply) for one person to attend a conference/workshop.

²⁵ These costs tend to be ongoing each year and vary with the number of users (this analysis assumes 500 users/year).

²⁶ These costs tend to vary according to the number of staff being trained, staff turnover, and the need for updated training due to major changes in software design.

b3

b3

Table 5

Comparison of System Content (Jr. High/Middle School)

System Content	CHJr ¹	COINJr ²	DJH ³
<u>Introduction</u>			
Orientation to function keys	no	no	yes
Overview of system content	yes	no	yes
<u>Assessment</u>			
On-line self-assessment ⁴			
abilities/skills/activities	yes	no	yes
interests/fields of knowledge	yes	no	yes
Capacity to complete paper-and-pencil version of on-line assessment prior to computer use ⁵	yes	no	yes
Capacity to input scores from paper-and-pencil administration of standardized instruments ⁶			
California Achievement Tests	no	no	yes
Comprehensive Tests of Basic Skills	no	no	yes
Iowa Tests of Basic Skills	no	no	yes
Metropolitan Achievement Test	no	no	yes
SRA Achievement Test	no	no	yes
Stanford Achievement Test	no	no	yes
<u>Identifying Occupational Alternatives</u>			
Capacity to select specific variables for identifying occupational alternatives			
abilities/skills/activities	yes	no	yes
apprenticeship programs	no	yes	no
aptitudes	no	no	yes
base/occupation	no	yes	no
career clusters	yes	yes	yes
education and training	yes	yes	yes
grades/test scores	no	no	yes
high school classes	yes	yes	no

¹ Choices Jr [Choices for Junior High and Middle Schools (Careerware-ISM Systems Corporation, 1992)]

² COIN Jr [COIN for Junior High and Middle Schools (COIN Educational Programs, 1992)]

³ DISCOVER for Junior High & Middle Schools (American College Testing Program, 1992)

⁴ The user reads descriptions of career variables and indicates personal preferences.

⁵ Potentially reduces the amount of time the user spends at the computer.

⁶ The user completes a paper-and-pencil administration of a standardized instrument prior to computer use.

interests/fields of knowledge

yes

no

yes

Obtaining Occupational InformationCapacity to access occupational titles
alphabetically without inputting
code numbers

yes

yes

no

Multiple sources used to develop
occupational information

yes

yes

yes

Cycle for updating of salary and
employment outlook data
(in months)var⁷

var

var

Cycle for updating all other
occupational information
(in months)

var

12

var

Information provided:

categorical information

DOT code

no

yes

no

OES code

no

yes

no

SOC number/fields of work

no

yes

no

Holland Code

no

yes

no

World-of-Work map affiliation/

data-people-things-ideas clusters

no

yes

yes

advancement/promotion opportunities

no

yes

no

aptitudes required

yes

yes

no

career ladder

no

yes

no

employment outlook

no

yes

no

educational requirements

yes

yes

yes

fringe benefits

no

yes

no

interest fields/likes-dislikes

yes

yes

no

methods for entry

no

yes

no

necessary tools & equipment

no

yes

no

opportunities for experience

no

yes

no

other requirements: experience/

licensing/certification

no

yes

no

personal qualities/temperaments

yes

yes

no

physical demands/strength

yes

yes

no

related information

apprenticeship programs

no

yes

no

educational majors/programs

no

yes

yes

military occupations

no

yes

no

occupations/specialties

no

yes

no

salary

average

no

yes

no

beginning

yes

yes

no

range

yes

yes

yes

top

yes

yes

no

skills required

yes

yes

no

suggested high school courses/programs

yes

yes

yes

training pathways/specific

occupational training

no

yes

no

⁷ var = Variable schedule for information updating depending on when total software revisions are completed (approximately every 1 - 3 years).

System Content	CHJr	COINJr	DJH
where to find more information	no	yes	no
work tasks/activities	yes	yes	yes
work setting/environment/ special conditions	yes	yes	no
Number of occupations included	250 ⁸	327	497
Number of related job titles	3500	1300	0

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Educational Planning

Capacity to crosswalk from educational files to occupational information files	no	yes	no
Capacity to link high school courses to related occupations	no	yes	no
Capacity to plan a high school curriculum on the basis of educational & career goals ⁹	no	no	yes
Comparison of grades to job cluster requirements	no	no	yes
Development of an educational action plan	no	yes	yes

Decision Making

On-line description of a career decision-making model	yes	no	yes
--	-----	----	-----

User Exit

Completing a brief on-line anonymous evaluation questionnaire (optional)	no	no	yes
--	----	----	-----

Local Data Option

Capacity to integrate local data into the system	no	no	yes
---	----	----	-----

⁸ Occupational clusters

⁹ Requires local data entry.

Table 6

Comparison of User Friendly Features¹ (Jr. High/Middle School)

User Friendly Features	CHJr	COINJr	DJH
Analogous color scheme video displays ²	yes	yes	yes
Multi-colored graphic enhanced screen displays	yes	yes	yes
System content color-coded ³	no	yes	no
Sound effects	yes	no	yes
Upper/lower case characters	yes	yes	yes
Special purpose function/alt keys			
back-up function	Esc ⁴	yes	yes
locate position in the system	no	no	yes
previous item back-up (on-line assessment instruments only)	no	no	yes
print screen	no	yes	yes
quick exit	Esc	yes	yes
repeat instructions/help	no	yes	yes
Menu driven screen sequencing	yes	yes	yes
Main menu indicates completed components/modules	no	no	yes
Preliminary operating instructions	yes	no	yes
Prompting for user input	yes	yes	yes
User controlled access to system content	yes	yes	yes
User data maintenance capabilities			
user data delete option	no	no	yes
password protection for user data	no	no	yes ⁵
Data collection for accountability and research			
data on system use			
aggregate	no	no	yes
individual	no	no	yes
demographic data			
aggregate	no	no	yes
individual	no	no	yes
user satisfaction data	no	no	yes
Introductory instruction omitted for experienced users	yes	no	yes

¹ Assumes United States software versions on IBM compatible microcomputers unless otherwise noted. Response time after data input varies among computers depending on type of processor, clock speed, memory available, and hard disk access speed.

² Video display (monitor) screen resolution (sharpness) varies with different monitors and display interfaces, with Super VGA, VGA, and EGA formats providing better resolution than CGA formats.

³ Color coding of instruction/error messages and display backgrounds to match system content.

⁴ Esc = Escape (Esc) key provides this function.

⁵ Uses private number or social security number in place of password.

User Friendly Features

CHJr

COINJr

DJH

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Purpose of each component/module
explained

yes

no

yes

Summary screen display/printout
for each component/module

no

no

yes

User memory record (system
capability to store user
data between sessions)

no

no

yes

Integration of user data from
one component/module into
another component/module

no

no

yes

Apple computer version available

yes

yes

yes

Table 7

Comparison of Support Materials and Services Available from Developers
(Jr. High/Middle School)

Support Materials and Services	CHJr	COINJr	DJH
<u>Support Materials for Users</u>			
Nonconsumable materials			
user guide/handbook	yes	no	yes
list of occupations			
ACT cluster	no	no	yes
alphabetical	yes	no	yes
career fields/occ. groups	yes	no	yes
job/World-of-Work families	yes	no	yes
similar occupations	yes	no	no
list of high school courses by			
job clusters	no	no	yes
poster - World-of-Work map	no	no	yes
quick reference card			
for function keys	no	no	yes
tutorial	yes	no	no
Consumable materials			
user guide/handbook	yes	no	yes
activity checklist	yes	no	no
individual career planning folder	no	yes	no
workbook (assessment and action planning)	no	yes	yes
<u>Support Materials for Institutions</u>			
<u>Manual</u>¹			
Publication date	1992	no	1991
Professional/paraprofessional			
administrative/research reports	yes	no	yes
counseling steps	no	no	yes
important phone numbers	yes	yes	yes
instructions for providing feedback to developers	yes	no	no
list of occupations			
alphabetical order	yes	no	yes
career fields/occ. groups	yes	no	yes
most common occupations	no	no	yes
similar occupations	yes	no	no
related to high school courses	no	no	yes
pilot test data	no	yes	yes
recommendations for integrating the software into service delivery	yes	no	yes
system design process & assumptions	yes	no	yes

¹ Professional manual for Choices Jr is called "Teacher's Guide"

Support Materials and Services

CHJr

COINJr

DJH

43

system overview

component/module overview

yes

yes

yes

user needs & system use options

yes

no

no

using the printout in counseling

no

no

yes

Site administrator

choosing the best location

no

no

yes

Technical

installation instructions

yes

yes

yes

localization instructions

no

no

yes

operating instructions

yes

yes

yes

trouble shooting

yes

no

yes

Newsletter

Information/updates

yes

yes

yes

Research & development

yes

yes

yes

Videotape

Counselor training videotape

no

no

yes

System installation videotape

no

no

yes

Demonstration Resources

Demonstration disk or demonstration

video for software evaluation

and/or public relations

yes

yes

yes

Counselor/Administrator Reports

Identification of users

no

no

yes

User characteristics

no

no

yes

Use of system components

no

no

yes

User evaluation of the system

no

no

yes

Total profile of system use

no

no

yes

Technical Support for Institutions**by Phone**

yes

yes

yes

Training from the Developer

On-site training

yes

yes

yes

National/regional/state conferences

yes

yes

yes">

Table 8

Comparison of Costs¹ (Jr. High/Middle School)

Feature	CHJr	COINJr	DJH
Software Purchase			
System ²	\$395 ³	249 ⁴	\$600 ⁵
Support Materials			
Consumable (assumes 500 users per year) ⁶			
activity checklist	\$106 ⁷	na ⁸	na
workbook (assessment & action planning)	na	975	na
Technical Support	800#	800#	800#
Training from the Developer			
National/regional conference/workshop registration fee ⁹	nc ¹⁰	nc	nc

¹ Some costs are constant across all systems, such as hardware, and hardware maintenance; supplemental career information resources; supplies (paper & printer supplies); facilities (physical renovation and computer furniture, if necessary); staff time necessary for developing and inputting local occupational, educational, and service delivery information, and developing organization-specific support materials; and conference travel expenses related to staff training. Appropriate constant costs should be included in any calculation of total CACG expenses for an organization.

² Only features where costs apply are included in this table. Refer to Table 7 for a complete listing of all support materials and services that are available from the developers.

³ One time cost (no annual software updates). Unlimited site license within one institution.

⁴ Discounts are available for software upgrades which occur approximately every 2-3 years.

⁵ One time cost (no annual software updates). Unlimited site license within one institution.

⁶ Discounts are available for software upgrades which occur approximately every 2-3 years.

⁷ One time cost (no annual software updates). Unlimited site license for one institution = \$900. Single copies of user and system supply materials provided with system lease. Additional copies available at extra cost from developers or by user reproduction. Multiple school district license = \$550 per school.

⁸ These costs tend to be ongoing each year and vary with the number of users (this analysis assumes 500 users/year).

⁹ Optional cost (\$25 per 100 copies, over 500 ordered = \$21.20 per 100)

¹⁰ na = Not available from the developer at present

¹¹ Optional cost (where fees apply) for one person to attend a conference/workshop.

¹² nc = no charge

Feature	CHJr	COINJr	DJH
<u>SUB-TOTAL COSTS</u>			
Software purchase	\$395	\$249 ¹¹	\$600
Optional costs without constants			
consumable support materials ¹²	\$106	\$975	\$0
conference registration fees ¹³	\$0	\$0	\$0
subtotal	\$106	\$975	\$0
<u>TOTAL COSTS</u>	\$501	\$1224	\$600

¹¹ \$299 networking price

¹² These costs tend to be ongoing each year and vary with the number of users (this analysis assumes 500 users per year).

¹³ These costs tend to vary according to the number of staff being trained, staff turnover, and the need for updated training due to major changes in software design.

Table 9

Availability of State-Specific Occupational Information in CACG Systems¹

Software	State/Territory/City ²
Choices and Choices CT ³	Arizona California Colorado District of Columbia Guam * ⁴ Florida * Indiana * Iowa * Louisiana * Maine * Mississippi * Missouri * ⁵ New Hampshire New York North Dakota * Northern Mariana Islands * Utah * Vermont *
Career Information System (CIS)	Alaska * California Colorado * Georgia * Hawaii * Idaho * Illinois * Minnesota * Montana * Nebraska * Nevada * New York (City) * Ohio * Oregon *

¹ Current as of July 1993

² California, Connecticut, New Hampshire, Massachusetts, New York, Texas, West Virginia, and the Virgin Islands have one or more computer-assisted career guidance systems in operation, but the State Occupational Information Coordinating Committee (SOICC) has not designated any as the official state-wide computer-based career information delivery systems (CIDS).

³ Choices Jr has received SOICC recognition in Alabama, Guam, Florida, Indiana, Iowa, Louisiana, Maine, Mississippi, North Dakota, Northern Mariana Islands, Rhode Island, Utah, and Vermont.

⁴ An asterisk (*) indicates official SOICC designation as a computer-based CIDS.

⁵ Missouri Choices is based on Choices CT and is administered by the Missouri SOICC.

Software	State/Territory/City
Coordinated Occupational Information Network (COIN)	California Indiana Missouri ⁶ Oklahoma * South Carolina *
DISCOVER for Colleges and Adults and DISCOVER for High Schools	Texas
Guidance Information System ⁷ Version 17 and GIS II	Alabama * Delaware * New Mexico * Rhode Island *
Kansas Careers	Kansas * North Carolina * Pennsylvania *
VISIONS	Maryland *
State-specific systems ⁸	Arizona * Arkansas * Kentucky * Michigan * New Jersey * Puerto Rico * South Dakota * Tennessee * Virginia * Washington * Wisconsin * Wyoming *

⁶ Missouri View is based on COIN and is administered by the Missouri Department of Education.

⁷ Data on "Employment Potential" (emerging, established and growing, large and stable, small and stable, declining, and individual talent) is automatically available for each state nationwide. An optional vocational-technical information file for each state is available at extra cost.

⁸ Includes computer-based CIDS with software and data that are unique to a particular state/territory, or use computer-based CIDS with software that has been substantially modified from an original system.

Table 10

CACG System Location, Data Base Origin, and Language

CACG System	Location ¹	Data Base Origin	Language
Career Information System (CIS)	USA (CIDS)	USA State	English
Choices	Belgium	Belgium	Flemish
			French
	Canada	Canada	English
		Canada	French
	France	France	French
	Hungary	Hungary	Hungarian
	Luxembourg	Belgium	French
	Netherlands	Netherlands	Dutch
	USA	USA	English
	USA (CIDS)	USA	English
Choices CT	Canada	Canada	English
		Canada	French
	USA	USA	English
Choices Jr	Canada	Canada	English
		Canada	French
	USA	USA	English
Modular C-LECT	USA	USA	English
COIN	USA	USA	English
	USA (CIDS)	USA State	English
COIN Jr	USA	USA	English
DISCOVER for Colleges and Adults	USA	USA	English
DISCOVER for High Schools	Canada	Canada	English
	USA	USA	English
DISCOVER Special Ver.	USA (Military)	USA	English
DISCOVER for Junior High & Middle Schools	USA	USA	English

¹ Where appropriate, USA locations are designated as a Career Information Delivery System (see also Table 9) or as a United States military installation. Unless otherwise noted, the system is available on a nation-wide basis. Systems available in multiple countries that use the country-of-origin data base and language are omitted from this table.

CACG System	Location	Data Base Origin	Language
Guidance Information System Version 17	USA	USA	English
	USA (CIDS)	USA State	English
	USA (Military)	USA	English
Guidance Information System (GIS II)	USA	USA	English
	USA (CIDS)	USA State	English
	USA (Military)	USA	English
Kansas Careers	USA (CIDS)	USA State	English
			Spanish
SIGI Plus	USA	USA	English
	Australia	Australia	English
VISIONS	USA (CIDS)	USA State	English

Table 11

Addresses and Phone Numbers of Computer-Assisted Career Guidance System Developers

CACG System	Address and Phone Number
Career Information System (CIS)	National Career Information System University of Oregon 1177 Pearl Street Eugene, OR 97401-3527 (503) 346-3872
Choices Choices CT Choices Jr	Careerware ISM Systems Corp. 350 Sparks Street Ottawa, Ontario K1R 7S8 CANADA (800) 267-1544
Modular C-LECT	Chronicle Guidance Publications, Inc. 66 Aurora Street P.O. Box 1190 Moravia, NY 13118-1190 (800) 622-7284
COIN (Coordinated Occupational Information Network) COIN Jr	COIN Educational Products 3361 Executive Parkway, Suite 302 Toledo, OH 43606 (800) 274-8515
DISCOVER for Colleges and Adults DISCOVER for High Schools DISCOVER for Junior High & Middle Schools	American College Testing Program ACT Educational Technology Center Schilling Plaza South 230 Schilling Circle Hunt Valley, MD 21031-1107 (800) 645-1992
Guidance Information System Version 17 Guidance Information System (GIS II)	Riverside Publishing Company Attention: GIS 8420 Bryn Mawr Avenue Chicago, IL 60631 (800) 323-9540
Kansas Careers	Kansas State University Suite 248 2323 Anderson Avenue Manhattan, KS 66502 (913) 532-6540
SIGI Plus	Educational Testing Service Center for Occupational and Professional Assessment Princeton, NJ 08541 (800) 257-7444

CACG System

Address and Phone Number

VISIONS

American College Testing Program
ACT Educational Technology Center
Schilling Plaza South
230 Schilling Circle
Hunt Valley, MD 21031-1107
(800) 645-1992
